

## Depersonalization, Self-Esteem and Body Image in Male-to-Female Transsexuals Compared to Male and Female Controls

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*Whether postoperative male-to-female transsexuals differ in regard to measures of self- and body image from a nontranssexual control group was investigated. A group of 30 postoperative male-to-female transsexuals and control groups of 30 males and 30 females completed self-report measures (depersonalization, self-esteem, gender identity traits, body image). Results showed that transsexuals and males scored higher on self-esteem and dynamic body image than the females did. No differences between the groups were found in terms of depersonalization and satisfaction. Transsexuals and females described themselves as more feminine than males. Regarding sex-role orientation, more androgynous subjects were found among transsexuals than in the control groups. General satisfaction is associated with feminine and masculine traits in transsexuals. Results are discussed in context of the function of these personality features for the identity development of male-to-female transsexuals.*

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**KEY WORDS:** depersonalization; body image; self-esteem; male-to-female transsexuals; gender identity.

### INTRODUCTION

In recent years, transsexualism has been a topic at the center of interest in psychological research, in which the exploration of psychological functioning of transsexuals was often ignored (Midence and Hargreaves, 1997). The aim of our study was to investigate personality variables, such as depersonalization, self-esteem

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and body image, and to compare postoperative male-to-female transsexuals (after a gender reassignment surgery and a voice operation) and male and female controls.

In clinical psychological research, studies have been conducted to examine the gender identity and specific relative stable personality traits of transsexuals before gender reassignment surgery. Lutz *et al.* (1984) found that male-to-female transsexuals described themselves as more feminine than homosexual males did. Brems *et al.* (1993) investigated the relationship between sex-role stereotypes and psychopathology in male-to-female transsexuals in comparison with psychiatric patients and college students. Results based on the Draw-A-Person Test indicated that the transsexuals produced female drawings that were more feminine than either of the other groups. Buhrich (1981) reported that different groups of transvestites and transsexuals showed higher scores on neuroticism and introversion (measured with the Eysenck Personality Inventory, EPI) than the general population did. Johnson and Hunt (1990) examined 25 male-to-female transsexuals to determine whether introversion, depression, adjustment to work, and gender reorientation were associated with the typological variables androphilia, gynephilia, feminine gender identity in childhood, and age at onset of transsexualism. Subjects completed three scales of the Minnesota Multiphasic Personality Inventory (MMPI) and several sexual orientation measures to assess the typological variables. No significant relation was found between psychological disturbances and typological variables. Two significant relations were reported between social gender orientation (e.g., living as a woman) and androphilia, and between work adjustment and gynephilia. Brown *et al.* (1996) examined personality traits (NEO Personality Inventory) and sexual functioning (Derogatis Sexual Functioning Inventory) of 188 nonpatient male cross-dressers, who were classified as transvestites, transgenderists, or transsexuals based on self assessment and cross-gender activities. Results indicated that transsexuals scored higher on the Aesthetic facet scale of Openness to Experiences and reported lower sexual drive than the other groups. Overall, transsexuals and transgenderists had more psychiatric symptoms and a more pronounced feminine gender role and a poorer body image than transvestites. No significant differences among the groups were found in the five large personality domains of the NEO-PI. Summarized, the findings of previous research concerning the personality of transsexuals are heterogeneous and it is not clear if transsexuals have different personality traits than that of nontranssexual groups. In this context, personality traits reflect different central stable aspects of the identity, which were relatively insensitive for change and development.

In this study, we focus on different specific variables, such as depersonalization, self-esteem, gender identity traits, and body image. These variables represent fundamental issues for assessing individual differences in personality.

Depersonalization experiences represent a specific type of dissociation and can be described as "a persistent or recurrent feeling of being detached from one's mental processes or body" (*DSM-IV*, American Psychiatric Association, 1994). Similar to dissociation experiences, depersonalization experiences may appear

along a continuum of severity ranging from common (mild experience) transient symptoms in response to psychosocial stress to a chronic depersonalization disorder causing marked distress (Steinberg, 1991). There are several results concerning the dissociative experiences among transsexuals. Walling *et al.* (1998) reported that 10% of 64 transsexuals have high dissociation scores (measured on the Dissociative Experience Scale) indicating the possibility of significant dissociative disorders. These results were explained by emphasizing the importance of dissociative experiences (such as fantasy proneness, absorption) in coping with gender dysphoria. Devor (1994) interviewed 45 self-defined female-to-male transsexuals. 60% of whom reported about one or more cases of severe child abuse. According to Devor, transsexualism may be an adaptive extreme dissociative survival response to severe child abuse. Similar to dissociation, depersonalization can also be considered as a defense mechanism to reduce negative affectivity (Wolfradt and Engelmann, 1999). In Hartmann *et al.* (1997), persons with gender dysphoria disorders (androphilic and gynephilic males) have the highest scores on the subscales derealization/ depersonalization and negative body image on the 'Narcissism Inventory' (NI). Further findings about the association between gender identity disorders and reported higher dissociative experiences were presented in other studies (Coons, 1992; Saks, 1998; Schwartz, 1988).

Some findings show that postoperative transsexuals have a disturbed body perception. Marone *et al.* (1998) found that in a Body Perception Test, in contrast to female-to-male groups with gender identity disorder, male-to-female groups had difficulties reintegrating various body areas into a single unit. They offer the explanation that anxiety plays an important role, leading to the inhibition of perception of the whole body.

The aim of our study was to investigate the differences between postoperative male-to-female transsexuals and controls with regard to different personality traits such as depersonalization experiences, self-esteem, body image, and gender identity traits. It was hypothesized that transsexuals describe themselves as more feminine and report more depersonalization experiences than the control groups. Furthermore, it was hypothesized that transsexuals report a more negative body image and a lower self-esteem than the control groups. A further aim was to determine the relationship between satisfaction and the other personality traits.

## METHOD

### Participants

Ninety adults participated. The sample consisted of 30 postoperative male-to-female transsexuals and 60 adults (30 females, 30 males) from Halle/Germany who were a control group. The mean age of all participants was 43 years (range 29–67 years). In the total sample, nearly all participants were employed in a wide range of

different jobs. All transsexuals received gender assignment surgery and a further operation to achieve a female voice by increasing the tension of the vocal cords. Voice operations were performed in the Department of Otorhinolaryngology, Head and Neck Surgery, at the University of Halle and were based on the technique as described by Isshiki (see Neumann and Berghaus, 1996). Voice operations were carried out in a range of 1–5 years after gender assignment surgery. Half (50%) of the transsexuals live without any partner (14.3% in the female group; 10.3% in the male group). Participants in this control group were matched with transsexuals according to age and occupational status. All subjects were volunteers and were not paid for their participation.

### Procedure

Participants filled in German versions of various questionnaires, including the scale for depersonalization experiences (SDPE) by Wolfradt (1998), the Self-Esteem-Scale (SES) by Rosenberg (1965; German Version: Ferring and Filipp, 1996), the Body-Image Questionnaire (BIQ) by Clement and Loewe (1996), a Gender Identity Trait Scale (GIS) by Altstötter-Gleich (1996) and were asked to answer a question concerning general life satisfaction.

- The Scale of Depersonalization Experiences (SDPE) consists of 20 items that require a 5-point frequency format, from 1 (*never*) to 5 (*very often*). The SDPE reflects four clusters of depersonalization: disturbances in sense of self (e.g., “I have the feeling that parts of my body don’t belong to me”), self-awareness (e.g., “I observe myself as a stranger”), certainty of self (e.g., “I look into the mirror without recognizing myself really”), and derealization (e.g., “The world around me seems unfamiliar”). The internal consistency of the SDPE was  $\alpha = .86$ .
- The 10-item SES is a widely used method for assessing general self-esteem. Participants indicated their answers in a four-point format. Internal consistency of the SES was  $\alpha = .78$ .
- The BIQ consisted of 20 items assessing the dynamic body image (e.g., “I feel very fit” or “Sometimes I feel an extreme energy in myself”) and rejected body image (e.g., “My body often annoys me” or “I am not satisfied with my body”). The answer format was from 1 (*not true at all*) to 5 (*totally true*). Internal consistencies for the subscale “rejected body image” was  $\alpha = .73$  and for the subscale “dynamic body image”  $\alpha = .63$ .
- The GIS consisted of 13 masculine traits (e.g., authoritarian, dominant, aggressive) and nine feminine traits (e.g., patient, understanding, sympathetic). Participants indicated their answers in a 5-point format, from 1 (*not at all*) to 5 (*extremely*). Based on an item analysis, only items with an item–total–correlation greater than  $r_{it} = 0.30$ , six female traits

( $\alpha = .71$ ) and nine male traits ( $\alpha = .80$ ), were used for further analysis (see Loewenthal, 1996).

- Finally a satisfaction item was presented: “Generally I am satisfied with my life,” from  $-3$  (*extremely dissatisfied*) to  $3$  (*extremely satisfied*).

RESULTS

Mean Differences

One-way-variance analyses among the groups were performed. The mean differences are shown in Table I. Contrary to our assumption, transsexuals did not report more depersonalization experiences than both control groups.

However, the transsexuals and the control males achieved significantly higher self-esteem scores than the control females ( $F(2, 86) = 7.30, p < .01$ ). The same results were found for the dynamic body image: transsexuals and males have a more dynamic body image than the females do ( $F(2, 87) = 7.33, p < .01$ ). Furthermore, no significant difference in the rejected body image among the groups was found. With regard to the gender traits the following results emerged: Transsexuals and females described themselves as more feminine than males. The groups did not differ on masculine traits. Finally, no significant differences were found for life satisfaction.

The Correlation Between Satisfaction and the Other Personality Traits

Pearson–moment–correlations between satisfaction and gender identity traits, self-esteem, body image, and depersonalization were calculated for the three groups separately (see Table II).

Table I. Mean Scores Among the Groups on Each Measure

	Transsexuals <sup>a</sup>	Controls	
		Females <sup>a</sup>	Males <sup>a</sup>
Self-esteem	3.44 <sup>b</sup>	3.01 <sup>a</sup>	3.37 <sup>a,b</sup>
Body image			
Rejected	2.35 <sup>a</sup>	2.13 <sup>a</sup>	2.03 <sup>a</sup>
Dynamic	3.77 <sup>b</sup>	3.16 <sup>a</sup>	3.48 <sup>a,b</sup>
Gender identity traits			
Feminine	3.91 <sup>b</sup>	3.63 <sup>a,b</sup>	3.36 <sup>a</sup>
Masculine	3.29 <sup>a</sup>	3.07 <sup>a</sup>	3.26 <sup>a</sup>
Depersonalization	1.54 <sup>a</sup>	1.45 <sup>a</sup>	1.54 <sup>a</sup>
General satisfaction	5.70 <sup>a</sup>	5.37 <sup>a</sup>	5.40 <sup>a</sup>

Note. Means having the same superscript (a or b) are not significantly different at  $p < .05$  in the Scheffé significant difference comparison.  
<sup>a</sup> $n = 30$ .

**Table II.** Zero-Order Correlations (*r*) Between Satisfaction and the Personality Measure for Each Group

	Transsexuals <sup>a</sup> <i>r</i>	Controls	
		Females <sup>a</sup> <i>r</i>	Males <sup>a</sup> <i>r</i>
Self-esteem	.17	.44*	-.14
Body image			
Rejected	-.18	-.18	-.04
Dynamic	.28	.24	.49**
Gender identity			
Feminine	.63**	.30	-.05
Masculine	.40*	-.16	.23
Depersonalization	.01	-.01	.19

<sup>a</sup>*n* = 30.\**p* < .05; \*\**p* < .01.

For the transsexuals, positive correlations between satisfaction and masculine as well as feminine traits were found. In the group of females, a positive correlation between satisfaction and self-esteem was found. In the group of males, general satisfaction correlated positively with dynamic body image.

### Different Sex Role Orientation Styles

According to the sex-typing model devised by Bem *et al.* (1976), four different sex-role orientation styles can be identified: Those who are high in terms of both gender traits (masculine and feminine), those who are low in both, those who are high in terms of one and low in terms of the other, and those who show the reverse combination. Based on this taxonomy *K*-means cluster analyses were performed on the data, using the standardized scores of the masculine traits and the feminine traits as the dependent variable and subjects as the independent variable. The clustering algorithm is an iterative procedure that assigns cases to a specified number of nonoverlapping clusters (Hartigan, 1975). As a result, the cluster analysis revealed four groups which showed no significant difference with regard to age.

The first group (*n* = 14) was labelled androgynous group and was characterized by high scores on masculine and feminine traits. The second group (*n* = 20) was called the undifferentiated group; the characteristic aspects are low scores on gender traits. The third group (*n* = 22) was named the masculine-typed group and consisted of those individuals who had low scores on feminine traits and high scores on masculine traits. Finally, the fourth group (*n* = 31) was named the feminine-typed group and was characterized by high feminine traits and low masculine traits. Table III shows the distribution of the members of the whole group among the sex-role orientation styles.

This distribution reached significance ( $\chi^2 = 24.75$ , *p* < .001). More than half of the transsexuals were in the androgynous group, more than half of the

**Table III.** Distribution of the Groups in Regard to the Four Sex-Role Orientation Types

	Transsexuals ( <i>n</i> = 29)	Controls	
		Females ( <i>n</i> = 30)	Males ( <i>n</i> = 28)
Androgynous (%)	71.4	7.1	21.4
Undifferentiated (%)	35.0	40.0	25.0
Masculine-typed (%)	13.6	22.7	63.6
Feminine-typed (%)	29.0	51.6	19.4

females in the feminine-typed group, and more than half of the males in the masculine-typed group. The proportion of the group members is nearly equal in the undifferentiated group.

**DISCUSSION**

This study investigates the differences between postoperative male-to-female transsexuals and matched control groups of females and males in terms of different personality traits. Results confirm previous findings, namely, that transsexuals consider themselves as adjusted females, not as pathological males (e.g., Cohen *et al.*, 1997). These results can be explained by the overall satisfaction with surgical voice operation (75% of transsexuals were satisfied). Our results indicate that transsexuals compared to females and males do not differ with regard to depersonalization and satisfaction. In comparison to other studies in which transsexuals had high dissociation scores (Walling *et al.*, 1998) or had a high depersonalization score (Hartmann *et al.*, 1997), our results speak in favor of a normal range for such phenomena. Depersonalization decreased in postoperative transsexuals, because the discrepancy between perceived body image and gender role is reduced. In this case, depersonalization as a defense mechanism against negative feelings that have their origin in this discrepancy is no longer necessary.

The most interesting outcome of our study is that the transsexuals described themselves as similar to males with regard to self-esteem and dynamic body image, and similar to females with regard to feminine traits. These findings underlined the intermediate role of male-to-female transsexuals in various personality traits between males and females. Transsexuals are confronted with the developmental task to integrate feminine and masculine traits and behavior in order to find a new sexual role of self-understanding. Furthermore, after their operation, they are more focused on bodily sensations, like sexual feelings (Lief and Hubschman, 1993). The differences between transsexuals and females concerning their attitude toward the body showed that transsexuals behave like males in this respect. Many studies showed that females have more negative body image evaluations than males do (see Muth and Cash, 1997; Feingold and Mazzella, 1998). Contrary to previous research (Marone *et al.*, 1998), the transsexuals did not perceive their body as more negative than did the control groups.

According to our results from the cluster analysis, transsexuals are more androgynous than the other groups. A broad research into sex-role orientation and personality showed that an androgynous style was indicative of greater psychosocial adjustment, such as satisfaction with life (Ramanaiah *et al.*, 1995) and body (Ludwig and Brownell, 1999). Taylor and Hall (1982) emphasize that androgynous persons were more flexible in adapting to a wide range of masculine and feminine behavior than were the other groups.

Furthermore, the correlational analysis indicates that high satisfaction in transsexuals is associated with the self-description of both masculine and feminine traits, while satisfaction in females is related to high self-esteem and in males to high dynamic body image. These findings emphasize the meaning of the gender identity traits for the self-image of transsexuals. It is important for postoperative male-to-female transsexuals to be accepted as females in the eyes of society. Satisfaction for females is strongly determined by positive self-evaluations, while males are more satisfied when a positive body evaluation is made. Our study examined only male-to-female transsexuals after their gender surgery change and an operation to achieve a female voice. It must be assumed that the point of time of questioning is important for the interpretation of data. Especially, male-to-female transsexuals are likely to be more dissatisfied with their life and more maladjusted before the operation than transsexuals after surgery with a positive result (see Lothstein, 1984). Pfäfflin (1993) found that male-to-female transsexuals described themselves as both more feminine as well as more masculine after their gender surgery change than before.

Further studies on the personality structure of transsexuals should concentrate more on the contribution of specific personality traits. It is necessary to find psychological measures which accurately assess on which dimensions postoperative transsexuals experience themselves as normal or deviant. However, only a long-term study may make it possible to find an answer to the question of the process of personality development in the transition period of preoperative to the postoperative life stage.

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